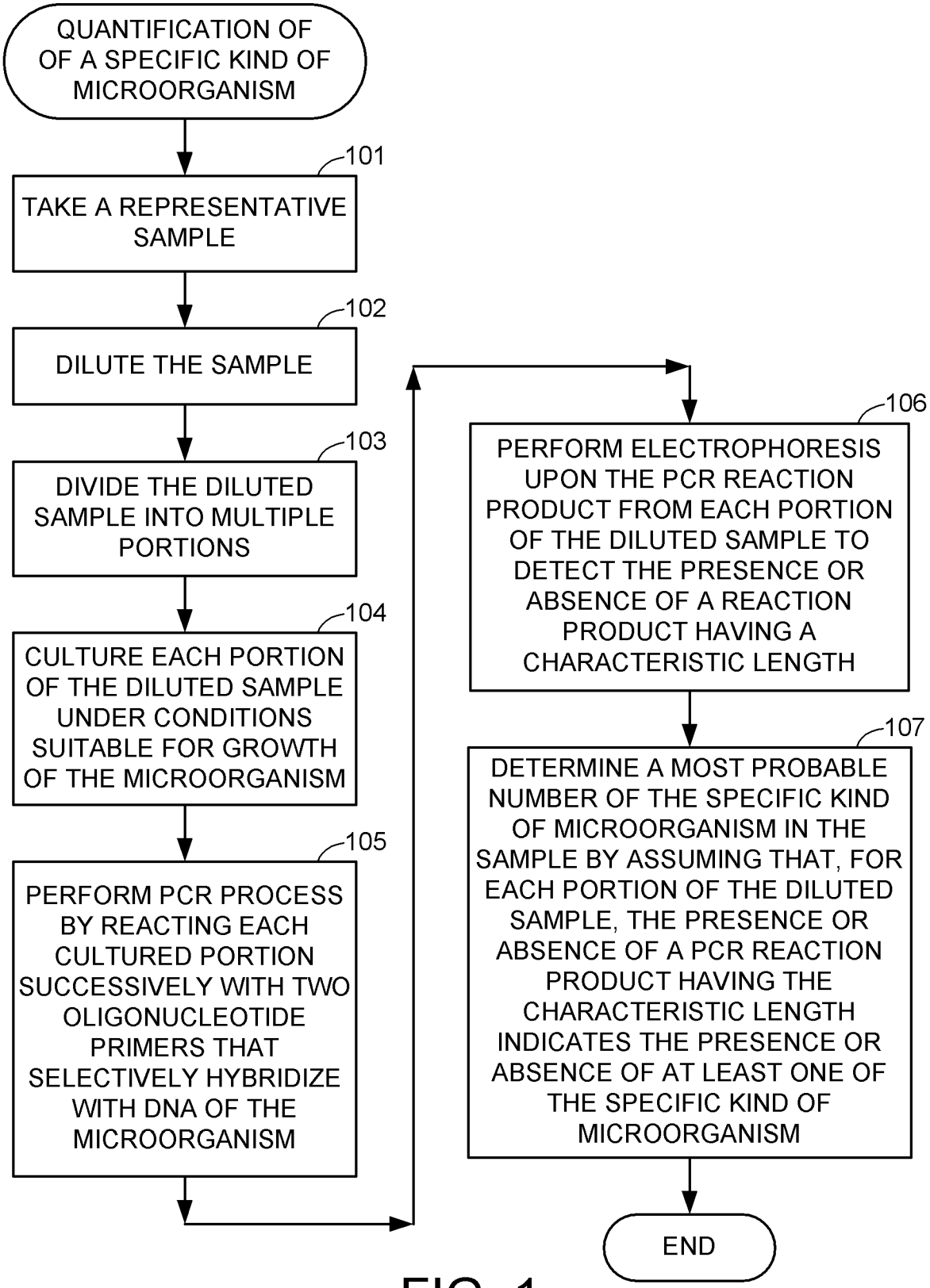
QUANTIFICATION OF OF A SPECIFIC KIND OF MICROORGANISM
101
TAKE A REPRESENTATIVE SAMPLE
102
DILUTE THE SAMPLE
103
DIVIDE THE DILUTED SAMPLE INTO MULTIPLE PORTIONS
104
CULTURE EACH PORTION OF THE DILUTED SAMPLE UNDER CONDITIONS SUITABLE FOR GROWTH OF THE MICROORGANISM
105
PERFORM PCR PROCESS BY REACTING EACH CULTURED PORTION SUCCESSIVELY WITH TWO OLIGONUCLEOTIDE PRIMERS THAT SELECTIVELY HYBRIDIZE WITH DNA OF THE MICROORGANISM
106
PERFORM ELECTROPHORESIS UPON THE PCR REACTION PRODUCT FROM EACH PORTION OF THE DILUTED SAMPLE TO DETECT THE PRESENCE OR ABSENCE OF A REACTION PRODUCT HAVING A CHARACTERISTIC LENGTH
107
DETERMINE A MOST PROBABLE NUMBER OF THE SPECIFIC KIND OF MICROORGANISM IN THE SAMPLE BY ASSUMING THAT, FOR EACH PORTION OF THE DILUTED SAMPLE, THE PRESENCE OR ABSENCE OF A PCR REACTION PRODUCT HAVING THE CHARACTERISTIC LENGTH INDICATES THE PRESENCE OR ABSENCE OF AT LEAST ONE OF THE SPECIFIC KIND OF MICROORGANISM
END

FIG. 1